

Eur J Vasc Endovasc Surg 17, 548-553 (1999)  
Article No. ejvs.1998.0766

## Book/CD-ROM Reviews

### **Vascular Intervention: a Clinical Approach**

B. A. Perler, and G. J. Becter, Eds.

Thieme, 1998.

733 pages, price DM278.

This book continues the fashionable theme of blurring the distinction between conventional vascular surgical techniques and endovascular interventions and usefully bridges the gap between the two specialities. The authorship is prestigious but, a little disappointingly, is exclusively based in the United States. The book has a strong North American flavour. There are sections on acute and chronic peripheral arterial occlusive disease, aneurysmal disease, cerebrovascular disorders, mesenteric and renal arterial disease, chronic venous insufficiency and venous thromboembolism. Portal venous hypertension and the Budd-Chiari syndrome are also covered in some detail, which seems rather at odds with the remaining contents of the book. Although the book is entitled *Vascular Intervention*, the editors have also commissioned chapters on pathogenesis, pathology, epidemiology, clinical assessment, imaging and medical management of vascular disease. One consequence of attempting such a comprehensive overview of vascular diseases is that many of the chapters are overly brief and rather simplistic, at least from a vascular surgeon's perspective. For example, the surgical management of chronic venous insufficiency is compressed into seven pages and, in an earlier chapter, there is a detailed description of how to feel for the popliteal pulse which would not look out of place in an undergraduate primer. On the other hand, the chapter on intravascular ultrasound (which is extremely informative and well illustrated) runs to 35 pages and 140 references. The lay-out is attractive but there are a considerable number of typographical errors and a number of pages had text and illustrations running off the page. It is also strange to find a chapter on thrombolysis in the midst of the aneurysm section, especially when another chapter on the same subject by different authors is found in the venous section. There is considerable overlap between chapters, especially those dealing with endovascular interventions.

I was surprised, given the explosion of interest in the aortic stent-grafting, that more space was not devoted to this new technique. More information on the experience with carotid angioplasty and stenting might also have been of value. Many of these chapters are written from a personal or institutional viewpoint. Although these experiences are of interest, there is a considerable amount of anecdotal opinion regarding the indications and results of endovascular intervention, which perhaps only serves to highlight the virtual absence of randomised, controlled studies in the field. How does this book compare with others in the market? The most obvious comparison to make is perhaps with Rutherford's *Vascular Surgery*, and as a reference the latter is superior. Having said that, one must presume that *Vascular Intervention* is aimed at a different readership. Thus it provides a valuable introduction to endovascular techniques for the vascular surgeon and an equally useful introduction to vascular surgery for the interventionalist. At 278DM it also represents good value for money.

**A. Bradbury**

Edinburgh, Scotland

### **Saphenous Vein Bypass Graft Diseases**

E. R. Bates, and D. R. Homes, Eds.

Marcel Dekker, 1998.

329 pages, price \$150.

This book is completely devoted to vein bypass graft disease following coronary bypass surgery, not peripheral bypass surgery.

This book is divided in three main parts:

- pathology and natural history of venous bypasses,
- diagnosis of vein bypass graft disease,
- treatment of vein bypass graft disease.

Each chapter has been written by recognised authors coming from very well-known surgical groups. Analysis from the literature is very clearly presented, with a discussion of complication rates in coronary artery bypass surgery and the natural history as well as the pathology of vein graft disease by two notable authors

in the field, M. Bourassa and W. G. Roberts, respectively. These different authors present their well-known and published studies and give their own opinion and analysis. In the second part, B. R. Chaitman and J. B. Hodgson present the possibilities for non-invasive and invasive diagnosis in venous bypass graft disease. In the third part, all the possible therapeutic options for the treatment of venous bypass disease are reviewed: medical therapy, preventive methods, PTCA, stenting, atherectomy, laser therapy and reoperation. In each chapter results from important series are presented, analysed and compared. The papers are all very well documented and clearly presented.

This book presents the state of the art in coronary artery bypass disease. It should be used by all cardiologists and cardiothoracic surgeons in practice or in training. The only problem with this book is the title, which I consider misleading. Venous graft disease is not confined to coronary arteries bypass, but is also described in numerous other situations, including femoropopliteal, femorodistal, and visceral artery bypass. In my opinion, the correct title should be "Saphenous Vein Bypass Graft Disease in Coronary Artery Surgery", rather than the one the authors have used.

**J. C. Kretz**

*Strasbourg, France*

### **Colour Duplex Sonography: Principles and Clinical Applications**

K.-J. Wolf and F. Fobbe, Eds.

Thieme, 1995.

306 pages; DM298.

This is an updated, revised translation of a successful 1993 German publication in which six authors, including the editors, offer an overview of the current applications of colour duplex imaging (CDI). Four short chapters on instrumentation, haemodynamics and technique are followed by eleven chapters on specific clinical applications. Each is subdivided into sections on anatomy, technique, clinical aspects and uses, followed by a discussion of the value of colour duplex in comparison to other imaging modalities in each application. The book concludes with a more comprehensive discussion of the physics and technology of CDI, and a review of current developments in ultrasound contrast agents.

The chapters are short and easy to read, well referenced and indexed, with a clear and consistent layout. All common vascular applications of CDI (carotid and

vertebral, peripheral arterial and venous) are covered. There are good sections on the newer topics of renal transplant ultrasound and penile erectile dysfunction. An excellent addition is a chapter summarising the assessment of the haemodialysis shunt, a subject rarely covered in other general or vascular texts. Other diverse topics include hepatic, splanchnic and scrotal ultrasound, and there is an entire chapter devoted solely to thyroid colour duplex imaging. Despite the detailed treatment of some of the minor applications, however, there are some disappointing shortcomings in the more clinically relevant chapters. There is no discussion of transcranial Doppler, a technique of increasing importance for the vascular sonographer. Although transplant artery stenosis is dealt with in detail, there is only a cursory reference to the assessment of native renal artery stenosis. In the peripheral arterial section graft surveillance is only briefly mentioned. The chapter on venous imaging concentrates almost solely on the diagnosis of deep vein thrombosis with only passing reference to the assessment of chronic venous insufficiency and no mention of vein mapping.

The remit of this book is to provide a concise but wide-ranging review of the current applications of CDI in a single source. It is very strong in the coverage of anatomical and technical aspects and would be a good introductory bench reference text for any sonographer or general radiologist with an increase in the practical aspects of CDI. Clinical discussion is fairly elementary, however, and review of recent literature and developments basic. In addition, as with all texts dealing with colour duplex imaging, it suffers from the very rapid advances being made in this field. The images are beginning to look outdated and in the comparison sections there is little mention of newer techniques such as magnetic resonance angiography. A similar general text with greater clinical emphasis and more specific, interesting and up-to-date discussion and review is listed below.<sup>1</sup> The vascular chapters in this book may not be informative enough for the dedicated vascular clinician or imager, and the other chapters contain much that is irrelevant to their requirements. A specific vascular duplex text might be better suited to their needs.<sup>2,3</sup>

**Kok-tee Khaw**

*St George's Hospital, London, UK*

### **Recommended Texts**

- 1 TAYLOR KJW, BURNS PN, WELLS PNT. Eds. *Clinical Applications of Doppler Ultrasound*. Lippincott-Raven, 1995.

- 2 ZWEIBEL W. *Introduction to Vascular Sonography*. WB Saunders, 1992, 3rd ed.  
 3 POLAK JF. *Peripheral Vascular Sonography*. Williams and Wilkins, 1992.

### **The Management of Carotid Artery Disease**

Sulzer Vascutek Education Program 1998

Cost: Unspecified

This CD-ROM, compiled and narrated by Mr. George Walsh of the Southern General Hospital in Glasgow, provides an overview of the management of carotid artery stenosis and of carotid body tumours. This is achieved by providing videos of operative technique, diagrams of the relevant surgical anatomy, audio-visual presentations and interactive text. The contents are logically arranged. It starts with an introduction in which the historical aspects of carotid surgery are covered, accompanied by a discussion of transient ischaemic attacks and their significance. This is followed by chapters on assessment of carotid artery stenosis, anaesthesia of patients with carotid artery stenosis, operative techniques, postoperative management, carotid body tumours, and finally a short description of internal carotid angioplasty.

Each of these topics is described in a concise yet informative style using the appropriate media. For example, the section on non-invasive assessment of the carotid arteries includes short video clips, demonstrating the use of duplex Doppler (including colour Doppler) in evaluating an internal carotid artery stenosis. The associated text describes the development of this diagnostic modality and its present limitations. Some words in the text are highlighted, allowing easy access to a glossary which defines these terms. Finally, this section concludes with some key points that highlight the important aspects of the section.

The CD-ROM is well referenced in an extensive bibliography that includes most of the important articles on the subject. Navigation between the various sections is easy and logical. Hardware requirements are compatible with present standards, although the amount of free disc space required is substantial (approximately 30 MB). The programme runs on both Microsoft Windows for PC or on Power Macintosh. Using Microsoft Windows, no problems were encountered installing and uninstalling the programme. The CD-ROM appears to be aimed at the individual in general surgical or vascular surgical training, and for this purpose it is ideally suited. Hopefully, it will also become a part of a greater library of such CD-ROMs, highlighting vascular surgical topics.

**Martin Veller**

*Johannesburg, South Africa*

### **Venous Disorders of the Legs. Principles and Practice**

L. L. Tretbar

Springer, London, 1998.

130 pages; D.M. 298.

This monograph, which has been written entirely by one author, itself now a rare phenomenon, reflects the long, personal experience of a distinguished physician in the diagnosis and treatment of venous diseases of the lower limbs. The book is a small, attractive piece of work of 130 pages, which includes 10 chapters and 93 illustrations, of which 16 are coloured. The whole work has been derived from the author's extensive experience in clinical practice and is addressed to the "every-day" practice of venous disorders. For this purpose, both the principles and the pitfalls of dealing with these diseases are elegantly described.

The contents can be classified into four sections: the first section (chapters 1–4) deals with the anatomy of the veins as well as the pathophysiology, clinical assessment, invasive and non-invasive tests for the diagnosis of venous disorders of the legs. In the second section (chapters 5–8), the principles of treatment, both medical and surgical, are analysed, while in the third section (chapter 9) the complications of chronic venous insufficiency are presented in detail. Finally, the last section (chapter 10) refers to thromboembolic disease. Although some of the most recent developments in the field have not been included, the clarity with which the venous function and dysfunction and its clinical evaluation are analysed, makes for a pleasant read, even to the experienced phlebologist. Treatment strategies, including surgery, sclerosing injections, or a combination of both based on the functional and not the anatomical disturbance, following pre-treatment testing, are individualised and are presented with vivid clinical examples and figures. Furthermore, the author does not limit himself to the clinical description of the facts, but presents novel ideas and suggestions such as those concerning the preservation of the saphenous vein with a diameter of <8–10 mm or a history of <15 years, noteworthy observations that require further investigation as well as a more extensive analysis.

The technique of sclerotherapy to which the author has contributed significantly in the United States, as well as the complications, are described in detail; however, treatment indications are not specified since – according to the author – it has not been established yet which patients can have chemical ablation of the saphenous veins and which require surgical intervention. The therapeutic management of the complications of chronic venous insufficiency is written in a very informative way. The value of the chapter is

not limited by the fact that other authors, including the writer of the present review, would disagree with certain therapeutic suggestions made by Dr Tretbar. For example, with the exception of acute thrombosis, management of an oedema can also be achieved by correct compression, without admission to hospital and the resulting immobilisation, occupation of a bed, expenses and loss of work-hours for the patient. In addition, the significant role of the incompetent perforating veins in venous ulcer and relapse of the ulcers should not be questioned. Overall, the book lacks updated bibliographical information. Out of a total of 133 references, 83 (62.5%) were published more than 10 years ago and are insufficient evidence for the present-day reader. Moreover, indications of surgical therapy or sclerotherapy, therapeutical placement of a filter at the lower vena, data on the management of secondary varicose veins, and references on the differential diagnosis of the various clinical conditions are completely missing. All the above can be found adequately written in a similar small book of 183 pages, which includes 17 contributors: that of G. Belcaro, A. N. Nikolaidis and M. Veller (eds) in *Venous disorders*, Saunders, 1995. Nevertheless, the rational description of the principles of the venous disorders and their treatment, based on the long experience of Dr Tretbar, makes his book useful and informative for those who are involved in the treatment of diseases of the veins of the limbs.

Young doctors, general practitioners, angiologists, vascular surgeons, internists, orthopaedic doctors and also gynaecologists will find useful information in this small but harmonious and clearly written monograph. Unfortunately, the price is somewhat high.

**P. B. Dimakakos**  
*Athens, Greece*

#### **Varicose Veins, Venous Disorders and Lymphatic Problems in the Lower Limbs**

D. J. Tibbs, D. C. Sabiston, M. G. Davies, P. S. Mortimer and J. H. Scurr, Eds.

Oxford University Press, Oxford/New York/Tokyo, 1998.

ISBN 0 19 262762 7, 254 pages; price £99.50.

The purpose of this textbook is to describe basic patterns of venous disorders in the lower limb, how to recognise them and the appropriate action to be taken. The authors aim at a broad readership: surgeons, doctors in training and nurses, and have succeeded in supplying neither too detailed nor too superficial information for readers with an interest in the field of

phlebology. The book is divided into three parts: (I) varicose veins and venous disorders, (II) acute deep vein thrombosis and pulmonary embolism, and (III) the swollen limb and lymphatic disorders. With regard to editing, there is some unnecessary overlapping of information in chapter 2, disordered venous function, and chapter 4, clinical patterns of venous disorders. The section on deep venous thrombosis outlines our present day understanding aimed at medical students as well as physicians and surgeons. Since few textbooks cover the subject of lymphology, many readers will welcome the 20 pages on this often-forgotten topic. Little new information is revealed, but this part is systematic and well designed for educational purposes. The chapter on varicose veins, which covers 170 of the 240 pages, provides most rewarding reading, even for those with experience in the field of phlebology. The necessity of preoperative functional assessment is clearly pointed out. Non-invasive duplex scanning is nowadays the main tool for investigation of venous disease. In combination with venous blood pressure measurements, plethysmography and in some cases video-venography, it will render all the pathophysiological information which is necessary to plan appropriate treatment. The authors manage to present the modern concepts of venous insufficiency, the practical evaluation of this category of patients and a rational therapeutical approach in a very comprehensible way. Their conclusions are not only based on their own opinions but also on internationally accepted standards. Since most surgeons are concerned mainly with the operative treatment of varicose veins, it is fortunate that the authors share with the readers their great personal experience with sclerotherapy. Their detailed description of the proper sclerosing technique in chapter IV may inspire doctors to take up this technique. Sclerotherapy has been discredited due to poor results, probably because of inappropriate indications and inadequate technique. Discussion of some controversial but important topics have been avoided. The authors did not shed light on the primary cause of primary varicose veins: is it insufficiency of the valves or dilatation of the vein due to inherently weak walls? The authors are experts in phlebology and I would have liked some clear indications for perforator ligation. The endoscopic techniques for perforator ligation were not even mentioned. Many of those who have a genuine interest in phlebology have pointed out the importance of reporting standards for venous disease. Since this textbook obviously also is aimed at a younger generation of doctors, information on the CEAP standardisation system, for example, should have been



included. Only half a page discusses the present state of deep venous valve surgery, which is disappointing, since the authors had a fine opportunity to clarify where we stand at the beginning of the new millennium. Is effective compression therapy the only lifelong treatment we can offer patients with deep venous insufficiency or does valve repair offer a realistic alternative? Despite the large number of references, an update on research in phlebology is not within the scope of this textbook. The main value of this easy-to-read textbook is how information is presented. Every chapter contains boxed sections with summaries, which makes it easy to get a quick overview of main topics and conclusions. The beautifully informative drawings and figures, as well as photographic illustrations, facilitate the understanding of the pathophysiology of venous disease. This book should be available in the libraries of all teaching hospitals.

**Andries J. Kroese**  
*Oslo, Norway*

### **Endovascular Surgical Techniques**

European Society for Vascular Surgery and Cardiovascular Research Trust.  
Med-Orion, 1998. Price £45.00.

This CD-ROM is an educational interactive presentation that has been produced from selected lectures on endovascular surgical techniques during the XI Annual Meeting of the European Society for Vascular Surgery in 1997. The first part, called "Hands on Menu", has no scientific interest; it shows briefly some short movies of the 1997 workshop organised by the ESVS in Lisbon. We can recognise some friends, but that is about all and the authors could have omitted this part.

However, the "Presentation Menu" is more interesting, even if the technical quality of the presentations is variable. They have selected 14 presentations on endovascular and imaging techniques given by a panel of respected speakers. You will find topics concerning endovascular treatment of AAA including: selection of patients, the role of duplex scanning, IVUs, measuring techniques, and classification of AAA for planning of endovascular repair procedures. Technical aspects, current problems and future perspectives are also partly covered. Five papers on occlusive disease, including iliac, superficial femoral artery, and carotid PTA, are also presented.

As this meeting was organised two years ago, and medical knowledge on this new technology has evolved, it is obvious that some parts of this CD-ROM

are outdated. Furthermore, many of these papers have been presented many times and published in a more complete format elsewhere. This CD-ROM provides a good review of some aspects of endovascular techniques in 1997 and it contains some concise and interesting presentations. The international perspective regarding authorship and geographical practice patterns makes it valuable as a concise reference. However, some presentations certainly need to be updated together with the technical quality of the CD-ROM, especially in view of the high cost of £45.

**Jean-Baptiste Ricco**  
*Poitiers, France*

### **Prevention of Venous Thromboembolism**

V. Fuster, Ed.

Futura, 1999. 429 pages; price \$115.

This review, prepared by members of the International Union of Angiology, is a concise and valuable statement regarding the state of the art of prevention of venous thromboembolism. This subject has been extensively studied and the group of authors has performed an admirable and ambitious work in reviewing more than 400 references. The content of the book and the additional CD-ROM provide a basis for the design of a thromboprophylaxis programme at any operating department; thus, the book is of use not only for general surgeons but all other specialists, e.g. gynaecologists and orthopaedic surgeons.

The authors have acknowledged current uncertainties under the heading "key questions that need to be answered". One such question concerns the length of the thromboprophylaxis, which becomes increasingly important in the days of less invasive surgery and shorter hospital stay. Should the treatment be continued beyond hospitalisation after, e.g., laparoscopic cholecystectomy and, if so, in which patient categories? We are left without a precise answer to this question for which the authors cannot be blamed. The relevant data simply do not exist. Some minor details could perhaps be clarified. The book describes in great detail the dosage of heparin and low-molecular heparin for thromboprophylaxis, yet there is no mention of dosages in the chapter regarding treatment. Treatment, of course, is not the main issue of the book, but it would be helpful to give doses. The treatment of pulmonary embolism is briefly reviewed, and it is concluded that directed thrombolysis with either tPA or uPA should be performed for iliofemoral venous thrombosis. This is a potentially dangerous recommendation, since such treatment without a temporary caval filter may cause pulmonary embolism.

The need for a temporary filter should have been answered in such a chapter. The information is largely based on tables that are easy to read. In some tables there are minor errors, e.g., in table 22 the table heading lists p e instead of percent of death.

In conclusion, this is a very valuable book for any surgical department, particularly if a programme for thromboprophylaxis is to be designed.

**J. Swedeborg**  
*Stockholm, Sweden*

### **Vascular Brachytherapy**

R. Waksman, Ed.

Futura, 1999. 630 pages; price \$149.

The preliminary success of vascular brachytherapy suggests that this technology will remain with us and become an adjunct therapy for endovascular intervention for obstructive vascular disease. It is also possible that it will be useful for other indications as well. We are in the middle of a technical revolution, and the enormous advances in the field of vascular brachytherapy made the second edition of this book (with extensive changes and revisions of the text) mandatory within a time frame of only two years. Forty-eight of the 52 current chapters are new or have been revised. This book is edited by an interventional cardiologist who is recognised as a key figure in the field of vascular brachytherapy. The impressive list of 111 contributors to this book contains scientists, cardiologists, radiation oncologists, radiobiologists, pathologists, vascular surgeons, radiation safety officers, regulators, engineers and technicians, and represents the multidisciplinary perspective of this technique.

In the book, a great effort has been made to present a detailed outline in mechanisms of vascular and radiation biology, radiation physics and pre-clinical animal investigations. Clinical applications for vascular brachytherapy (mainly coronary) are discussed.

The book contains 52 chapters and is divided into nine parts: Part I deals with the mechanisms of restenosis after endovascular procedures and alternative treatments. Part II is about radiation biology concepts and discusses how vascular brachytherapy can prevent restenosis. Part III is mainly dedicated to the physics of radiation. Part IV contains the reports of pre-clinical animal investigations and the use of external and endovascular radiation is discussed. In Part V the integration of vascular brachytherapy and associated devices, such as stents (but also the use of radioactive stents), are discussed in detail. Part VI presents the latest data from the use of brachytherapy for superficial femoral artery lesions and arteriovenous dialysis shunts and details of the clinical trials for coronary artery disease, using beta and gamma emitters, are provided in Part VII. In Part VIII the industry is given an opportunity to describe the technicalities of their vascular brachytherapy system, concerning design, isotope choice and delivery system. Finally, Part IX discusses economics, health care issues, safety requirements and environmental aspects. All the chapters are well referenced and most illustrations are clear.

Most of the development in this field, and, therefore, most of the research, derives from studies in coronary arteries. At this time this textbook represents an overview of the current technical applications of vascular brachytherapy which allows the readers to place future publications in their proper context. Not all the presented data and applied techniques can be adapted to peripheral arteries. Nevertheless, this book is of great importance for all vascular surgeons and interventional radiologists who are active in the field of vascular radiation, or who have intentions to start a programme in that direction. Personally, I have no doubt that the potential benefits of vascular brachytherapy have been neglected by vascular surgeons. For those who feel the same, this book is a good opportunity to fill the gap and stay in touch with the front runners.

**M. R. H. M. van Sambeek**  
*Rotterdam, The Netherlands*